

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re the Application of

Inventors : **Gina E. Kelly et al.**
Application No. : **09/963,251**
Filed : **September 25, 2001**
For : **INTERACTIVE MEDICAL TRAINING SYSTEM**

APPEAL BRIEF

On Appeal from Group Art Unit 3626

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I. REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., Eindhoven, The Netherlands, assignee of the present application by an assignment of the priority application by all of the inventors dated September 24, 2001 and recorded by the USPTO at reel 012210, frame number 0349.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-23 are pending in the application, all of which have been rejected three times. The claims being appealed are Claims 1-23.

IV. STATUS OF AMENDMENTS

No amendments were submitted in response to the rejection mailed May 18, 2007.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Claim 1 is the only independent claim. The subject matter of the claimed invention as described in Claim 1 is a computer-based interactive medical training system comprising a case study presented in a computerized display in a virtual patient chart format for a patient exhibiting a given medical condition, wherein the virtual patient chart format simulates realistic aspects of a patient chart of medical records. Presenting the

case study in the form of a virtual patient chart presents the training in a form with which the clinician is familiar, as the subject matter being taught is used in practice in a patient chart. Actual computerized displays of virtual patient charts are shown in Figs. 3-6 of the present application for instance. Thus, the training is realistic and uses the patient chart format actually employed in medical practice.

Fig. 1 is a flow chart which takes the reader through use of an actual implementation of a computer-based interactive medical training system which is illustrated in the screen shots of Figs. 2-14. In the first step of the flow chart, the user picks a case study as explained on page 4, lines 19-21. Fig. 2 gives an example of two possible chase studies, Vascular Case Study #1 for a carotid tumor and Vascular Case Study #2 for a false aneurysm in the right popliteal artery. Figs. 3-6 illustrate computerized displays from the constructed embodiment in which the selected case study is presented in the format of a virtual patient chart. The virtual patient chart format is described on page 4, line 22-34 and on page 7, lines 3-14. As Figs. 3-8 illustrate, the virtual patient chart of the implemented invention has tabs 30 across the top by which various medical information about the patient can be accessed. Fig. 4, for instance, shows the Medical Records tab 32 being accessed, where the patient's clinical history, exam reports, and medications are found. See page 7 at lines 3-14.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether Claims 1-23 stand correctly rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

2. Whether Claims 1-23 stand correctly rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

3. Whether Claims 1-23 stand correctly rejected under 35 U.S.C. §103(a) as being unpatentable over US Pat. 6,546,230 (Allison) in view of US Pat. 4,539,435 (Eckmann), US Pat. 6,149,585 (Gray), US Pat. 5,065,315 (Garcia), and US Pat. 5,791,907 (Ramshaw et al.)

VII. ARGUMENT

A. Prior Proceedings in this Case.

Claim 1 is an original claim in this case. It has not been amended at all since it was filed in 2001. The same 23 claims that were in the case at the outset remain in the case, with only minor clarifying amendment to dependent Claims 10 and 17 and the rewriting of Claim 13 to depend from Claim 1.

In the first Office action of February 28, 2006, the claims were rejected as anticipated by Ramshaw et al. and unpatentable over combinations of Allison, Eckmann, Gray and Garcia. This Office action said that a virtual patient chart was described by Eckmann at col. 4, lines 47-50 and col. 5, lines 58-68. In the amendment filed on May 11, 2006, applicants pointed out that the Eckmann case study bears no resemblance to a virtual patient chart format.

In a final Office action of February 8, 2007 the claims were rejected as unpatentable over Allison, Eckmann, Gray, Ramshaw et al. and Garcia. In this Office action it was stated that a virtual patient chart was found in Eckmann at col. 5, lines 60-

67. The Examiner also stated that a virtual patient chart was disclosed in Allison in col. 6, lines 42-51 and at col. 2, lines 28-32.

On April 12, 2007 applicants filed a "Pre-Appeal Brief Request For Review," in which it was pointed out that neither Eckmann nor Allison show or disclose a virtual patient chart format. Applicants concluded by stating that:

"A central limitation of the only independent claim in this case, a computer-based medical training system with a virtual patient chart format, is absent from all of the cited references."

In response to the Pre-Appeal Request, the final rejection was withdrawn and the rejection being appealed was made on May 18, 2007. This Office action again rejected Claims 1-23 as unpatentable over Allison, Eckmann, Gray, Ramshaw et al. and Garcia. This Office action goes back to the position of the first Office action, contending that a virtual patient chart was described by Eckmann at col. 4, lines 47-50 and col. 5, lines 58-68. The contention that Allison discloses a virtual patient chart has been dropped. This most recent Office action adds the new §101 and §112 rejections of Claims 1-23.

B. The Section 101 Rejection.

The §101 rejection appears for the first time in this third Office action. The rejection first contends that the claim language "does not clarify" that a computer processor or structure is part of the system. This sounds like a basis for a §112 rejection, and indeed it becomes so in the next rejection. It appears that the Examiner wants a computer system pulled into the claims. At the end, the rejection rests on the contention that the claimed invention "fails to have a tangible result." But the preamble of the claims makes it abundantly clear that this is not the case. The claimed "system" is for

"medical training," a clearly tangible result. Furthermore, the system is "computer-based" and it is "interactive," as the detailed description and Web pages of the drawings illustrate. The system presents a "computerized display" in a "virtual patient chart format." These are clearly tangible results as the Web pages illustrate. This patent is not claiming an abstract idea in a paper patent, it is claiming a medical training system with tangible results illustrated by actual computerized displays, Web pages, of a constructed implementation. For all of these reasons it is respectfully submitted that the claimed medical training system is statutory subject matter under 35 U.S.C. §101.

C. Claims 1-23 are Clear and Definite.

The §112 rejection contends that the recited step of "presented in a computerized display" does not make it clear whether the computer is part of the claim or if all that is claimed is the display on the screen. This is part of the §101 rejection recast as a §112 rejection. The cited phrase is a limitation describing the medium in which the case study is presented, as the detailed description makes clear and indeed as does the claim language by itself. The noun "computer" is not in the claim and does not need to be, nor its absence explained. The word "computerized" is an adjective modifying the noun "display." A "computerized display" is well known to those skilled in the art and most laypersons. It is respectfully submitted that there is nothing indefinite about this phrase or any of the claim language.

D. The §103 Rejection Based On the Five References

The §103 rejection of Claims 1-23 on the basis of Allison, Eckmann, Gray, Ramshaw et al. and Garcia has essentially been around since the very first Office action.

It was the only ground of rejection in the Final rejection, which was withdrawn in response to applicants' Pre-Appeal Request. The issue is clearly drawn, since the current rejection rests on the same basis as the first Office action rejection, which is, Does Eckmann describe a "virtual patient chart" at col. 4, lines 47-50 and col. 5, lines 58-68?

These passages read as follows:

"The publication might include an article on a novel approach to dealing with a certain medical problem. The publication might also include a case study of a situation to which test questions might be directed." Eckmann at col. 4, lines 47-50

The publication referred to is shown in Fig. 1 of Eckmann as a book. It may include a "case study." There is no suggestion of a virtual patient chart.

"The following is an actual example of some of the textual material which might be used in a typical educational module.

This example is directed to physicians. The physician would receive a monthly publication. For each simulated patient management problem, the publication would include a brief patient history and a list of choices for each question. The list would be brief--simply a reference so the physician does not have to request that the questions be repeated. The text might read as follows:" Eckmann at col. 5, lines 58-68

The patient management problem includes a brief patient history. A patient history may be part of a patient chart as shown under the Medical Records tab 32 of the virtual patient chart of Fig. 4 of the present application. Again, there is no suggestion of a virtual patient chart in Eckmann.

It is respectfully submitted that Claims 1-23 are patentable over the combination of Allison, Eckmann, Gray, Ramshaw et al. and Garcia.

VIII. CONCLUSION

Based on the law and the facts, it is respectfully submitted that Claims 1-23 define statutory subject matter, that Claims 1-23 are clear and definite, and that Claims 1-23 are patentable over the combination of the Allison, Eckmann, Gray, Ramshaw et al. and Garcia references. Accordingly, it is respectfully requested that this Honorable Board reverse the grounds of rejection stated in the May 18, 2007 Office action being appealed.

Respectfully submitted,
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APPENDIX A: CLAIMS APPENDIX

Claims 1-23 are involved in this appeal:

1. (original) A computer-based interactive medical training system comprising a case study presented in a computerized display in a virtual patient chart format for a patient exhibiting a given medical condition, wherein the virtual patient chart format simulates realistic aspects of a patient chart of medical records.

2. (original) The computer-based interactive medical training system of Claim 1, wherein the virtual patient chart further comprises diagnostic reports of a plurality of diagnostic imaging modalities.

3. (original) The computer-based interactive medical training system of Claim 2, wherein the diagnostic reports further comprise diagnostic reports on the given medical condition.

4. (original) The computer-based interactive medical training system of Claim 2, wherein the diagnostic reports further comprise diagnostic images from the plurality of diagnostic imaging modalities.

5. (original) The computer-based interactive medical training system of Claim 2, wherein the diagnostic reports further comprise instruction that a given diagnostic modality is not appropriate or deemed necessary to diagnose the given medical condition.

6. (original) The computer-based interactive medical training system of Claim 1, wherein the virtual patient chart further comprises general medical information on the given medical condition.

7. (original) The computer-based interactive medical training system of Claim 6, wherein the general medical information further comprises one or more of typical findings for a given pathology, signs, symptoms, treatment and prognosis for the given medical condition.

8. (original) The computer-based interactive medical training system of Claim 1, wherein the virtual patient chart further comprises at least one of laboratory reports and pathology specimen pictures.

9. (original) The computer-based interactive medical training system of Claim 1, further comprising a test on the comprehension or application of the information of the virtual patient chart.

10. (previously presented) The computer-based interactive medical training system of Claim 9, wherein the test comprises a test which is available following review of some or all of the material of the virtual patient chart.

11. (original) The computer-based interactive medical training system of Claim 9, wherein the virtual patient chart is presented by a computer, and wherein the test is scored by the computer presenting the patient chart.

12. (original) The computer-based interactive medical training system of Claim 9, wherein the virtual patient chart is presented by a computer, and wherein the test is scored by a computer connected to the computer presenting the patient chart.

13. (previously presented) The computer-based interactive medical training system of Claim 1, further comprising a tutorial presented in a computerized display, the tutorial presenting one or more teaching segments of medical information which contain an animation illustrating the medical information being taught.

14. (original) The computer-based interactive medical training system of Claim 13, wherein a teaching segment further comprises a textual passage describing the medical information and an animation illustrating the medical information.

15. (original) The computer-based interactive medical training system of Claim 14, wherein the animation comprises an animated graphic.

16. (original) The computer-based interactive medical training system of Claim

14, wherein the animation comprises a moving picture.

17. (~~currently amended~~ previously presented) The computer-based interactive medical training system of Claim 14, wherein the textual passage and the animation are viewable on a computer screen without scrolling.

18. (original) The computer-based interactive medical training system of Claim 13, wherein a teaching segment further comprises a quiz of the medical information taught in the segment.

19. (original) The computer-based interactive medical training system of Claim 18, wherein the number of teaching segments is two or more.

20. (original) The computer-based interactive medical training system of Claim 18, wherein the quiz further comprises a graphic with which a student interacts to demonstrate knowledge of the medical information.

21. (original) The computer-based interactive medical training system of Claim 20, wherein the graphic comprises a diagnostic medical image.

22. (original) The computer-based interactive medical training system of Claim 13, wherein the medical information comprises a clinical application of medical diagnostic imaging.

23. (original) The computer-based interactive medical training system of Claim 13, wherein the medical information comprises at least one of a scientific principle, medical practice, or operation of medical equipment.

APPENDIX B: EVIDENCE OF RECORD

None.

APPENDIX C: RELATED PROCEEDINGS

There are no related proceedings.